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Graphical Abstract

Heterocyclic Letters 1: (2), 2011, 94 - 95

Microwave-induced indium-catalyzed synthesis of pyrrole fused with indoline in water.

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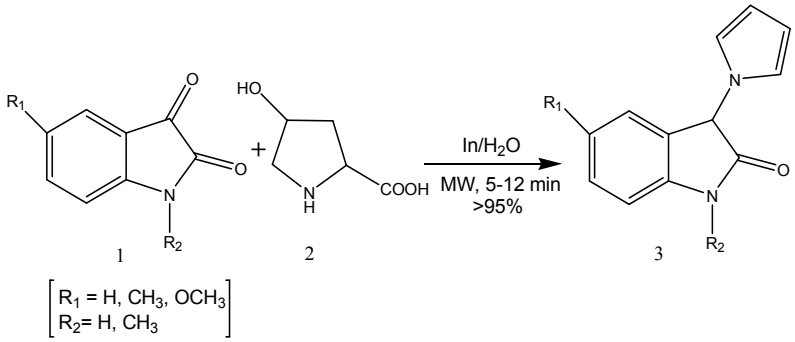
An expeditious microwave-induced indium metal-catalyzed synthesis of pyrrole fused with indoline in water is developed by reacting isatin and 4-hydroxyproline.



Heterocyclic Letters 1: (2), 2011, 96 - 105

A Novel Synthesis Of 14-Aryl-14*h*-Naphto[2,1-*B*]Pyrano[3,2-*E*][1,2,4]Triazolo[1,5-*C*]Pyrimidines

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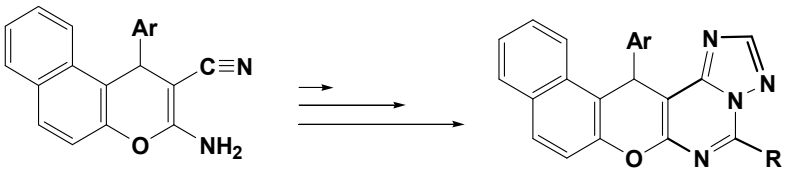
N^{1}-tosylamino-11-aryl-1,12-dihydro-11*H*-naphtopyrano[2,3-*d*]pyrimidines have been prepared by the reaction of 2-[(ethoxyalkylidene)-amino]-4-aryl-3-cyano-4*H*-naphto[2,1-*b*]pyrans with tosylhydrazine at reflux of toluene.These intermediate were condensed with an excess of triethyl orthoformate to give 14-aryl-14*H*-naphto[2,1-*b*]pyrano[3,2-*e*][1,2,4]triazolo[1,5-*c*]pyrimidines.The structures of all these newly synthesized compounds have been confirmed by spectral and analytical data.



Heterocyclic Letters 1: (2), 2011, 106 - 111

Synthesis, Characterization and Antitumor Study of N,N-bis (5- Bromo-2- Hydroxybenzaldehyde)-1,2-ethylendiimine and its Pt Complex

Mohammad Reza Rezakhani[a], Shahriar Ghammamy[a,*],Gholamreza Rezaei Behbahani[a], Hajar Sahebalzamani[b], Zahra Shokri Aghbolagh[a], Mahbobeh Tanhayi[a]

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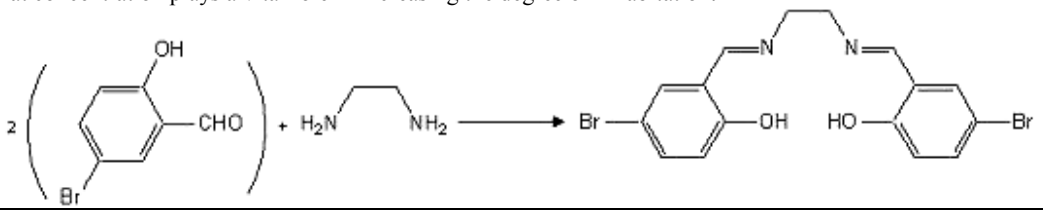
The result of antitumor activities show that the metal complex exhibit antitumor property and it is important to note that it shows enhanced inhibitory activity compared to the parent ligand. The mechanism by which these complex act as antitumor agents is apoptosis. It has also been proposed that concentration plays a vital role in increasing the degree of inhabitation.



Heterocyclic Letters 1: (2), 2011, 112 - 116

Synthesis Of Some New 1-Substituted 3-Trifluromethyl-5-Phenyl-4-(Substituted Phenyl Azo) Pyrazoles As Antifungal Agents

Vineeta Sareen, Vineeta Khatri and Prakash Jain

Department of Chemistry,University of Rajasthan, Jaipur – 302004
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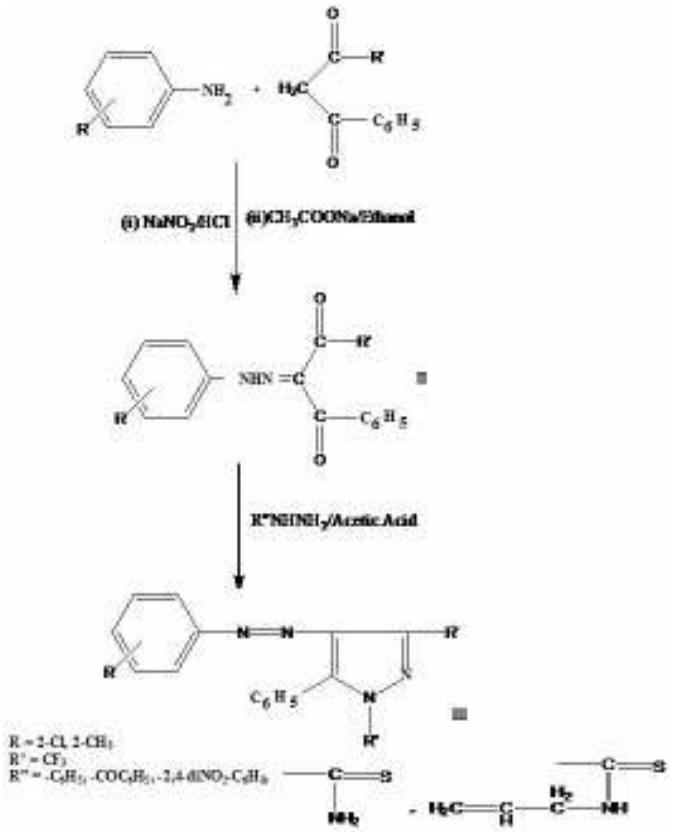
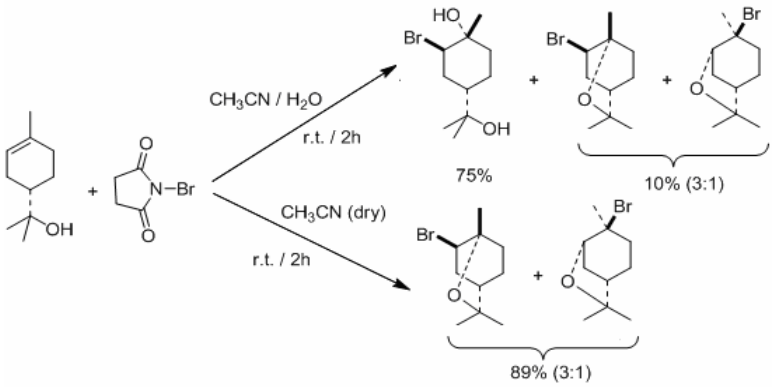


Heterocyclic Letters 1: (2), 2011, 118 - 125

Inter- and Intramolecular Cohalogenation of (*S*)-α-Terpineol with NBS

Antonio M. Sanseverino, Victor de Oliveira Rodrigues and Marcio C. S. de Mattos*

Instituto de Química, Departamento de Química Orgânica, UFRJ, Brazil.
E-mail: mmattos@iq.ufrj.br



Heterocyclic Letters 1: (2), 2011, 126 - 135

Synthesis, Characterization and Antimicrobial Studies of Co(II), Ni(II), Cu(II) and Zn(II) Complexes of N, O, Donor heterocyclic Schiff Bases

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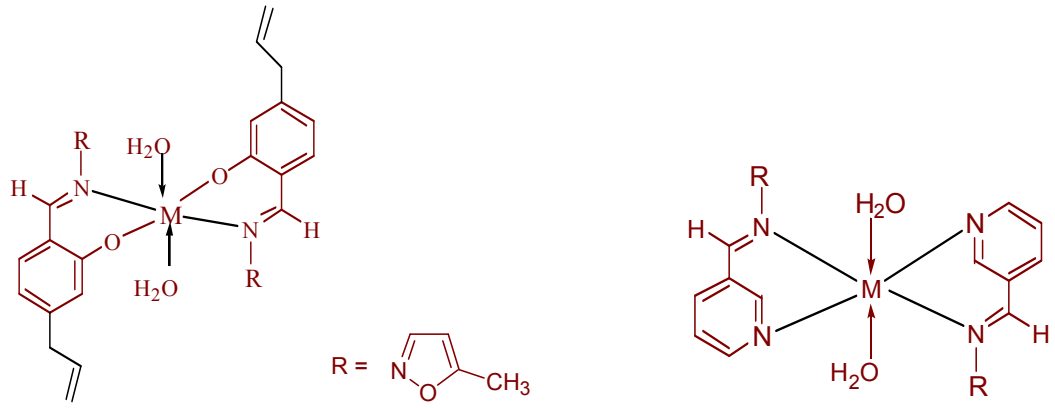
[3]Department of Microbiology, Osmania University, Hyderabad, Andhra Pradesh 500 007, India

The Schiff base ligands L_1 4-allyl-2-{[(5'-methyl-3'-isoxazolyl)imino]methyl}phenol [AMIIMP] and L_2 N-[5'-methyl-3'-isoxazolyl]-[(E)Pyridine)]methylidine]amine[MIPMA] and their metal chelates with Cobalt (II), Nickel (II), Copper (II) and Zn (II) metal ions have been synthesised and characterized. Antimicrobial activity of the ligands and their metal complexes against bacteria (*Bacillus, Pseudomonas*) and fungus (*R. Solani, A. Niger*) has been carried out.



M=Co(II),Ni(II),Cu(II),Zn(II)

Heterocyclic Letters 1: (2), 2011, 136 - 145

Synthesis and biological activities of 2-(furoyl amino)-5-(substituted aryl)-1, 3, 4-thiadiazole and 2-(substituted benzoyl amino)-5-(furyl)-1,3,4-thiadiazole.

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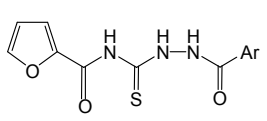
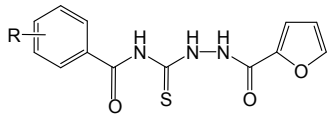
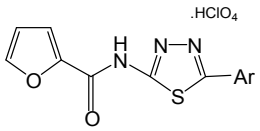
1-(substituted aroyl)-4-furoyl- thiosemicarbazides **3(a-e)** / 1-furoyl-4-(substituted benzoyl)-thiosemicarbazides **7(a-f)** are synthesized under phase transfer catalysis, which on cyclisation with perchloric acid in acetic anhydride furnish perchloric acid salt of 2-(furoylamino)-5-(substituted aryl)-1,3,4-thiadiazoles **4(a-e)** / 2-(substituted benzoylamino)-5-(furyl)-1,3,4-thiadiazoles **8(a-f)** respectively. The sulphur and nitrogen containing compounds were screened for anti-microbial activity showed convincing inhibition against *E. coli, S. typhi*, *S. aureus,* and *B.Substilus* bacteria.



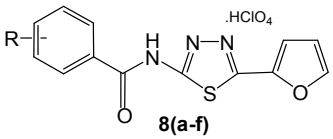
3(a-e)



7(a-f)



4(a-e)



8(a-f)

Heterocyclic Letters 1: (2), 2011, 146 - 152

Synthesis and Antimicrobial Activity of Novel 2-Amino-3-Cyanopyridines

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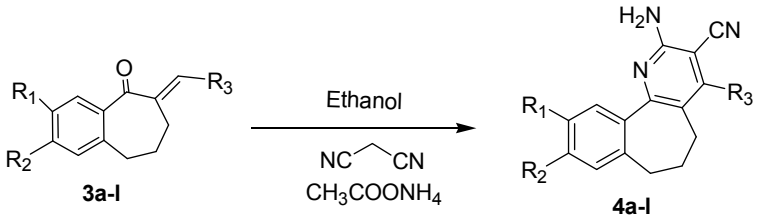
[b]Centre for Environment, Institute of Science and Technology,
Jawaharlal Nehru Technological University Hyderabad, Hyderabad-500072, Andhra Pradesh, India

A series of 2-amino-3-cyanopyridine derivatives **4a-l** have been synthesized from chalcones **3a-l**. The compounds 4a-l were evaluated for their antimicrobial activity.



3a-l **4a-l**

Heterocyclic Letters 1: (2), 2011, 154 - 157

Antimicrobial Activity of Eugenol Derivatives.

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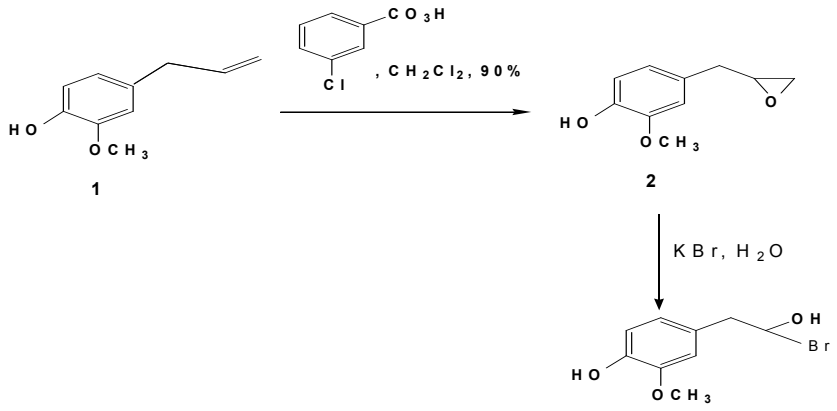
The alkene group in eugenol was epoxidized resulting in the synthesis of epoxide-eugenol. The heterocyclic ring in epoxide was cleaved to a bromoalcohol derivative. The compounds synthesized epoxide-eugenol, bromo alcohol and euginol were tested for antimicrobial activity against *Staphylococcus aureus* (ATCC 25923).

Scheme 1



Heterocyclic Letters 1: (2), 2011, 158 - 164

1, 5-Bis [(4-Dithiocarboxylate-1-Dodecyl-5-Hydroxy-3-Methyl)Pyrazolyl]Pentane As Copper Corrosion Inhibitor In 0.1 M Sulphuric Acid

Rosa Vera*, Alfonso Oliva and Aurora Molinari

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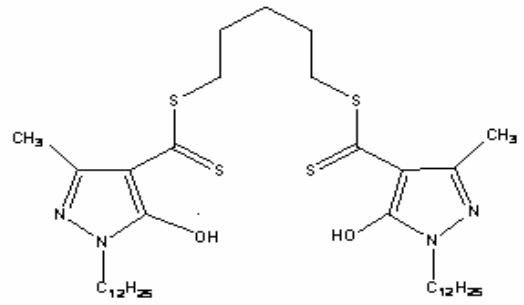
email: rvera@ucv.cl

The tetradentate ligand 1,5-bis[(4-dithiocarboxylate-1-dodecyl-5-hydroxy-3methyl)pyrazolyl] pyrazolylpentane (H_2BDTCPP) behaves as organic surface coating to inhibit the copper corrosion in 0.1 sulphuric acid with an inhibition efficiency of 62.1 %. These properties can be explained on the basis of a physical adsorption of the ligand over the copper surface, followed by the chemical absorption of the Cu BDTCPP complex formed during the corrosion process.



Heterocyclic Letters 1: (2), 2011, 166 - 175

Synthesis, Characterization and antimicrobial studies on mixed ligand complexes of Co (II), Ni (II) and Cu (II) with Isoxazole Schiff base and 1, 10-phenanthroline/ 2, 2' -bipyridine ligands.

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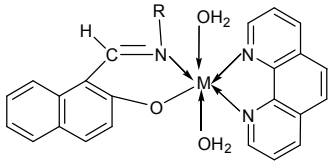
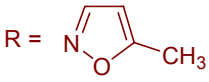
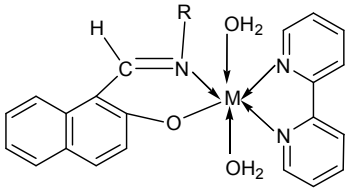
Synthesis, Characterization and antimicrobial studies of Cobalt (II), Nickel (II) and Copper (II) ternary complexes of mixed ligands with Schiff base derived from 3-amino 5-methyl isoxazole with 2-hydroxy 1-naphthaldehyde and 1, 10-phenanthroline/ 2, 2' bipyridine. The micro analytical, magnetic moment, IR and electronic spectral data analysis have been used to confirm the structure of these complexes. The synthesized compounds have been tested against microorganisms such as (*bacillus* and *pseudomonas*) bacteria and (*R.Saloni* and *A. niger*) fungi.



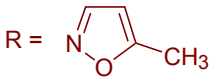
M (II)-(MIIMN)-(1, 10 phen)



M=Co (II), Ni (II), Cu (II)



M (II)-(MIIMN)-(2, 2' bipy)



M=Co (II), Ni (II), Cu (II)

Heterocyclic Letters 1: (2), 2011, 176 - 188

Synthesis of chalcones, 1, 3-thiazines and 1, 3-pyrimidines derivatives and their biological evaluation for anti-inflammatory, analgesic and ulcerogenic activity

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